TWENTY-FOURTH

ANNUAL REPORT

OF THE

SANITARY CONDITION

OF

BOOTLE,

BY THE

MEDICAL OFFICER OF HEALTH.

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Bootle:
Bootle Printing and Publishing Co., Ltd., 107, Balliol Road.

1897.

With

Dr. R. J. Sprakeling's

Compliments.

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SANITARY CONDITION OF THE COUNTY BOROUGH OF BOOTLE.

DURING the year 1896, the Returns of the Local Registrar, Mr. Edwin Smith, record 1759 *Births* and 1026 *Deaths* within the Borough, the natural increase of the population being therefore 733. On comparing these numbers with those in 1895, it will be seen there was a decrease of both births and deaths. viz:—of 64 in the number of births. and of 49 in that of deaths, the natural increase in the past year having been only 15 less than in 1895.

POPULATION.

Although a number of new houses have been erected during the year, and the natural increase of the population has been 733. still as the number of births has been 64 less than that in 1895, I do not feel justified in estimating the population at more than 52,000; which number will therefore form the basis on which I will calculate the statistics during the past year. It must be remembered that the population of Bootle is always of a very fluctuating character, and has, I believe, varied considerably during the year, in consequence of which I cannot make the estimate with that degree of accuracy which can be done in many large towns, but judging from the birth-rate being considerably higher than that of the 33 large towns. I do not think the estimate that I have made, viz:—52,000, can be an excessive one. The following table shows the number of births and deaths within the Borough during the 10 years 1886-1895 (inclusive) and in the year 1896, and I think fully proves the fluctuating character of the population, and shows in my opinion the need of a quinquennial census in towns like Bootle.

Years.	Births.	Deaths.	Years.	Births.	Deaths.
1886	1737	897	1891	1780	1165
1887	1595	920	1892	1710	951
1888	1681	820	1893	1828	1153
1889	1668	886	1894	1660	917
1890	1706	1017	1895	1823	1075

1896—Births 1759—Deaths 1026.

BIRTHS.

The number of births registered in Bootle in 1896 was 1759, of which 907 were males and 852 females. Table No. 1 shows how the number of births have varied during the year, the largest number (176) being in October, and the smallest (132) in the previous month (September). The total number in 1896 was 64 less than that in 1895, but was 99 more than that in 1894. The *Birth Rate* was equal to 33·82 per 1,000 and exceeded that of the 33 large towns by 3·1 and that of England and Wales by 4·1 per 1,000.

DEATHS.

The number of deaths registered in Bootle in 1896 was 1026, of which 533 were males and 493 females, so that the deaths of males exceeded that of females by 40. The total number was 49 less than in 1895 and the *Death Rate* of persons registered in Bootle was 19·73 per 1,000. As however 79 paupers said to belong to Bootle died in the Walton and Mill Road Workhouses of the West Derby Union, and thus died " outside the district, " and 58 deaths of persons not belonging to Bootle occurred " within the district " principally in the Bootle Borough Hospital and in the Corporation Hospital for Infectious Diseases, Linacre, the difference between these numbers, viz. 21 has to be added to the 1026 deaths before mentioned. The death-rate was, without this addition 19·73, but with this addition 20·13 per 1,000, the latter being 1·42 per 1,000 less than in 1895. The death-rate with this addition was about 1 in the 1,000 in excess of that of the average of the 33 large towns, which was 18·9. The death-rate in England and Wales was 17·1 per 1.000. Of the 79 paupers " belonging to Bootle " who died in the Workhouses there were admitted 1 in 1889, 3 in 1892. 2 in 1893, 2 in 1894. 18 in 1895, and 53 in 1896. I find that a considerable number of these deaths were of persons admitted from Common Lodging Houses, and were therefore often persons of the vagrant class, wandering from one town to another and with no fixed residence. I think therefore it is very doubtful whether many of these deaths in the Workhouses are really of persons belonging to Bootle.

INFANT MORTALITY.

The deaths of infants under 5 years of age within the Borough amounted to 509, and thus comprised 49·6 per cent of the whole deaths. The total number was 14 less than that in 1895, and the percentage one less. The deaths of Infants under one year were 324 and were 11 less than in 1895. They were 184·2 per 1,000 of the registered births, in other words 18·4 per cent. of those born died within the first year of life, a percentage very nearly the same as that in 1895. The largest number of deaths under 5 years and also under one year occurred in June, when 69 children under 5 years died, and of these 53 were Infants under one year. By the published returns of Infant Mortality measured by the proportion of deaths under one year to the registered births, I find that in the 33 large towns the average mortality was 167, and in the whole of England and Wales 147 per 1,000.

Analysis of the Causes of Deaths— In reviewing the causes of deaths in Bootle during the past year, it is satisfactory to note that the total number of deaths was less, and also the death-rate was less than in 1895. The death-rate exceeded the average death-rate of the 33 large towns by about 1 in the 1,000. In order to show this clearly, I will first compare the death-rates in Bootle in the 4 quarters of the year with the approximate death-rates of the 33 large towns and of the whole of England and Wales.

Bootle.			33 Large Towns.			England and Wales.		
1st	Quarter	19·21	1st	Quarter	19·5	1st	Quarter	17·9
2nd	,,	20·06	2nd	,,	18·2	2nd	,,	16·3
3rd	,,	19·77	3rd	,,	19·1	3rd	,,	16·3
4th	,,	19·69	4th	,,	18·8	4th	,,	17·9

It will be noticed from the above death-rates that only in the first quarter was that for Bootle less than in the large towns. In the other 3 quarters the mortality was greater than the average in the large towns, and this was notably so in the 2nd quarter when the death-rate in Bootle was nearly 2 in the 1,000 in excess. It should be remembered that these comparisons apply only to the average mortality of the 33 large towns, as there are many of these large towns in which the mortality is much greater than that in Bootle. In 1895 the largest number of deaths in Bootle in one month was in July. when 133 deaths were registered, causing the death-rate in the 3rd quarter to be 23·9. the highest in the year. but in 1896 the large Infant mortality in June was the principal factor in causing the increased mortality in the 2nd quarter. as many as 69 children under 5 years of age having died in June, a large proportion of whom were victims to that fatal Infantile disease, diarrhœa. On comparing the total mortality in Bootle in 1896 with that of the preceding year, it will be seen that although diarrhœa caused as many as 72 deaths, 66 of which were of Infants, yet this large number did not amount to the total number of deaths from diarrhœa in 1895, which was 107, of which 102 were of Infants. There was a decrease also in 1896 in the number of deaths from the following diseases; 12 from whooping cough, 7 from diphtheria and croup, 13 from tubercular disease, 11 from Influenza, 8 from diseases of the kidneys, no less than 64 from diseases of the lungs and air passages. and a slight decrease in some other diseases. On the other hand, there was an increase of 5 deaths from puerperal fever, 26 deaths from measles, 9 from scarlatina, 12 from diseases of the stomach. liver, &c.. and 13 from atrophy and debility, and 36 from diseases of the brain, &c. 3 of the deaths from scarlatina, however, and 4 of the deaths from enteric fever, were from the out-townships. According to the registrar's returns, there was a decrease of 14 deaths in the Bootle Borough Hospital. and an increase of 11 deaths in the Corporation Hospital for infectious diseases. There was a great decrease of paupers attended by the District Medical Officer during the year, the numbers in the 4 quarters having been as follows:— 1st quarter 250. 2nd quarter 197. 3rd quarter 166. 4th quarter 200—total 813. Table No. 4 gives a summary of the deaths from the various classes of diseases, including the zymotic disease. to the prevention and, if possible, the extinction of which. the special attention of every Medical Officer of Health is directed. I shall now refer to the sanitary work accomplished during the year, and in accordance with the order of the Local Government Board, I shall supply information on each of the 7 principal zymotic diseases, and give a summary of the action taken, or which I have advised the sanitary authority to take, to prevent the spread of these diseases.

ZYMOTIC DISEASES.

The number of deaths from the 7 principal zymotic diseases, viz.:—small-pox, measles, scarlatina, diphtheria, whooping cough, fevers and diarrhœa (after deducting 7 deaths of persons outside the district, viz:—3 from scarlatina, and 4 from enteric fever, occurring in the Hospital for Infectious Diseases, and adding 3 deaths from measles, and 1 from whooping cough, occurring in the Walton Workhouse) was 169, which number was 15 less than that in 1895. Of this number 130 were of children under 5 years. The zymotic death-rate was equal to 3·25 per 1,000. The total number (169) of these zymotic diseases was nearly 2 less than the average of the preceding 10 years, and compares favourably with that in 1895, which was 17·7 in excess of the average of the preceding 10 years. The number of infectious or contagious diseases notified to the sanitary authority during the year was 528, which again compares favorably with that in the preceding year, which was 602, or 74 more. The diseases notified were as follows:—small-pox 1, scarlatina 297, diphtheria 17, membranous croup 6, typhus fever 1, enteric fever 132, puerperal fever 12, erysipelas 62—total 528 The comparison of the approximate death-rates in Bootle with the death-rates from these diseases in the 33 large towns was as follows:—

	Bootle	33 Large Towns	England & Wales
Small-pox	—	—	—
Measles	0·596	0·71	0·56
Scarlatina	0 384	0·22	0·18
Diphtheria	0 134	0·38	0·29
Whooping Cough	0·288	0 57	0·41
Fevers	0·461	0·19	0·17
Diarrhœa	1·384	0·79	0·55
Totals	3·247	2·86	2·16

On comparing these death-rates it will be noticed that the reason of the total zymotic death-rate in Bootle being in excess of the 33 large towns, was principally due to the increased death-rate from diarrhœa and fevers. The death-rate from scarlatina in Bootle was slightly in excess but the death-rates from measles, diphtheria, and whooping cough, were smaller than those of the large towns. After all the total death-rate from these diseases in Bootle was only 0·38 above that of the average of the 33 large towns. It will be seen by the Local Government Board's Table B, that of the 528 cases notified, 117 were from Derby Ward, 231 from Knowsley Ward, and 180 from Stanley Ward, therefore the notifications in Knowsley Ward were nearly double those from Derby Ward, and 51 more than those from Stanley Ward. The number of deaths of persons from these notifiable zymotic diseases that occurred in their homes were as follows:—Derby Ward 4, Knowsley Ward 21, Stanley Ward 13. The number of deaths from these wards in the Hospital were 6 from Derby Ward, 8 from Knowsley Ward, and 14 from Stanley Ward. The total number of deaths of persons from these diseases, both in their homes and in Hospitals was therefore as follows:—Derby Ward 10, Knowsley Ward 29, and Stanley Ward 27. The number of deaths in the Linacre Hospital from the out-townships was 7, viz:—1 from Litherland, 1 from Crosby, 4 from Seaforth, and 1 from Wales (a Hospital nurse).

HOSPITAL FOR INFECTIOUS DISEASES.

The total number of infectious cases treated in the Hospital for Infectious Diseases at Linacre was 317, which number was 43 less than the number treated in 1895. Of the total number 248 were residents, and 69 were non-residents. Of the residents admitted and treated in the hospital 61 were from Derby Ward, 103 from Knowsley Ward, and 84 from Stanley Ward. Of the non-residents 49 were from Seaforth, 3 from Waterloo, 13 from Litherland, 3 from Crosby and 1 from Thornton. There was thus a decrease of 17 cases from Bootle and 26 cases from the out-townships. There was a decrease of 20 cases from Knowsley, and 5 from Stanley Wards, but an increase of 8 cases from Derby Ward. The Local Government Board's Table A, shows that the total number of deaths in the hospital from infectious cases was 41, viz.:—34 persons from Bootle, 6 from the out-townships and 1 a hospital nurse, whose home was in Wales, giving a total death-rate of nearly 13 per cent. The percentage of deaths from the Bootle cases was about 13·7 and that from the out-townships about 10·2. I may here remark that this hospital is absolutely necessary in a borough like Bootle where a large amount of cottage property exists. The isolation it affords is invaluable, for without it, infectious diseases would often spread rapidly. A severe case of small-pox was imported into the Borough in October last, but after its existence was known, its immediate removal to hospital, together with the other means adopted, prevented the spread of the disease. The spread of scarlatina has also been checked by the isolation it affords, and in short the utility of the hospital has been repeatedly demonstrated. Athough the cost of an Infectious Hospital is considerable, yet there is no doubt the money is well spent, as the spread of infectious disease would be still more costly, and, in addition, would bring into bad repute any town in which a large zymotic mortality occurred.

DISINFECTING APPARATUS.

The apparatus used at the disinfecting station is "Washington Lyon's Patent," which can furnish a heat of 250° by superheated steam. It has been in use for several years at the station in Linacre and its efficiency I think has been thoroughly proved. The following is a list of the various articles disinfected during the year:—Mattresses, 956; beds, 927; bolsters and pillows, 1,538; blankets, 1,344; quilts, 733; sheets, pillow-cases, &c., 403; carpets, 274; curtains. 1,046; wearing apparel, 4,814; miscellaneous articles, 425—total, 12,460. Disinfection has therefore been systematically carried out with regard to all infected articles of clothing, bedding, &c., and separate vans are used for the conveyance of these articles to and from the station. When the articles sent are very foul, or have been used by patients suffering from very infectious diseases, such as small-pox or typhus, they are often burnt at the expense of the Sanitary Authority. Infected houses and rooms are fumigated by sulphurous acid gas, and carbolic powder and liquid are largely used around infected premises, foul middens, drains, &c. We also use in Bootle "Daley's Disinfecting Box" by which persons in an infected house can be disinfected. The advantages of this apparatus are, that it can be wheeled noiselessly (having india-rubber tyres to the wheels,) through any ordinary door into a house, and thus prevent the infected person having to pass through the public street. It can also disinfect both adults and children through having a movable floor. All disinfectants are furnished free of cost. In accordance with my usual course, I will now proceed to make observations on the seven principal zymotic diseases, stating all that could be ascertained as to the outbreak and extension of these diseases, together with the advice given, and the measures taken, to prevent their spread. The first zymotic I will remark upon is

SMALL-POX.

During the past year only one case of small-pox was notified, or rather found out, as it was not notified in the usual manner. In consequence of information kindly supplied to me in October by Dr. Hope, Medical Officer of

Health of Liverpool, that several persons were then residing in Bootle who had a day or two previously arrived in the port of Liverpool in the S.S. "Trinidad," in which steamer a case of small-pox had existed, the residences of these persons were daily visited by our Sanitary Inspectors, with the result that after a few days a man in Wordsworth Street was found to be "sickening" for some zymotic disease. This man I was informed had actually been attending to the small-pox case on board the S.S. "Trinidad," but on account of the long incubation period of this disease, it was not developed until the time mentioned. On the earliest positive symptoms of this dreaded disease, I directed that the man should be removed to the Isolation Hospital at Linacre, where the disease soon became fully developed, and he remained in this valuable institution until completely convalescent and free from infection. The house was thoroughly disinfected and all the inmates of the house were disinfected by "Daley's Patent Disinfecting Apparatus," the bedding used by the patient was burnt, and I re-vaccinated all the remaining inmates of the house. Although the house contained 10 persons the disease did not spread. I may here remark that the information supplied by Dr. Hope was extremely useful, as without it I probably should not have been aware of the existence of the disease, until several other persons had been attacked, as indeed was the case in 1895, when 6 cases were discovered in one day in a house in Conway Street.

MEASLES.

This disease was epidemic in the first half of the year, and was at its height in March, when 10 deaths were registered from it. It began to decline in April, when the mortality dropped to 4. The deaths from it in the 1st seven months were as follows:—1, 6, 10, 4, 3, 1, 1, respectively, and there was 1 death from it in October and 1 in November. Altogether 28 deaths were registered from it in Bootle, and as there were 3 deaths from it of Bootle children in Walton Workhouse, the total number was 31, which number was 29 above that in 1895, and 11·4 above the average of the preceding 10 years, and 0·11 less than the average of the 33 large towns. The death-rate from this zymotic was 0·596, (or nearly 0·6) in the 1000, an increase of 0·558 over that in 1895. As measles is a very infectious disease, and not notifiable, on the outbreak of the epidemic, I wrote to the Clerk to the School Board requesting him to instruct the School Board Visitors to prevent, as far as possible, children from infected houses being sent to school, and to let me know the names of all children suffering from the disease, so that we could take precautionary measures. I may mention that, as a rule, this disease is more fatal in the cold months, and spreads more rapidly on account of the children, through the necessity for warmth, and the want of proper covering at night, congregating together more, and the opportunities for inter-communication between sick and healthy children is therefore more abundant. In cold weather the mortality is also increased through lung complications. As the epidemic increased, it was found that the public schools were the great centres of infection, but as the epidemic was general throughout the Borough it was not considered necessary to close any of these schools. In October I received from the Local Government Board a copy of "Extracts from the Annual Report of the Medical Officer to the Local Government Board" on the subject of Measles in England and Wales, and after perusing these Extracts I reported to the Health Committee as follows :—"The measures for the prevention and the spread of this disease appear to me to depend almost entirely on compulsory notification, for without this we can do but little, and moreover it appears to me that our powers as to isolation, disinfection, &c., are very limited without compulsory notification. On the other hand, the mortality from measles (as the Report shows and as I have frequently pointed out) is often only really exceeded to any extent by diarrhœa. I think the expense is really the only drawback to compulsion, and I observe that in some places the Sanitary Authority will only pay the fee for measles for the first member of a family attacked, and in some other places a fee of only 1/- is given for each case." During the epidemic a very large number of children were attacked, and I think it is fortunate that the number of deaths was not larger. It is said that this disease is infectious even before the eruption appears, and this is often made use of as an argument against its compulsory notification.

SCARLATINA.

This zymotic has been for the last 11 years, more or less, epidemic, the largest number of deaths (36) having been registered in 1894, and the smallest number (8) in 1889. The mortality in 1895 dropped to 13, but during last year it increased to 20, after deducting 3 deaths in the Infectious Hospital from the out-townships. The number of notifications in the last two years have been nearly the same, 300 having been notified in 1895, and

297 in 1896, the number of notifications in 1894 having been as large as 638. The percentage of deaths to notifications in 1895 was only 4·3, whilst in 1896 they were 6·7 (an increase of one-half). Table No. 2 shows the number of notifications of scarlatina in each month of the past year, and Table No. 4 gives the number of deaths (including those in the Infectious Hospital) in the months when fatal cases occurred. It will be noticed that the only months when no fatal cases occurred were August and November. The number of cases admitted into Hospital from Bootle was 160, and that from the out-Townships 40, making a total of 200. The number admitted into Hospital from Bootle in 1895 was 124, and that from the out-townships 57. The number admitted in 1896 from Bootle was therefore more, and that from the out-townships less, than in 1895. Out of the total number of cases notified in Bootle, more than one-half were treated in Hospital, which I think shows the appreciation by the inhabitants of this Borough of the treatment given at this Institution. After every case of scarlatina, fumigation of rooms, stripping of paper from walls, disinfection of clothes, bedding, &c., at the station are strictly enforced. The death-rate from scarlatina in Bootle was 0·38, an increase of 0·16 over that of the 33 large towns which was 0·22.

DIPHTHERIA.

The number of notifications of this disease was only 17, but 7 persons died from it. The death-rate was 0·13 per 1,000, and was 0·25 below the average of the 33 large towns. The total number of notifications was one less, and the number of deaths 5 less, than in 1895. Eight cases were treated at the Isolation Hospital. Of the total deaths 5 were of children under 5 years of age, and 3 of the deaths occurred in the Hospital. Thetotal deaths were 1·3 below the average of the preceding 10 years. Diphtheria is a disease which has never been very prevalent in Bootle.

CROUP.

The number of cases notified as membranous croup was only 6, but of this number 5 deaths were registered. There is, however, such a similarity between this disease and diphtheria that many medical men believe them to be identical.

WHOOPING COUGH.

The number of deaths from whooping cough registered in Bootle was 14, but as the death of a Bootle child occurred in Walton Workhouse, the total number of deaths of persons belonging to Bootle was 15. They were nearly all of children under 5 years of age. The total number was 11 below that of 1895, and 10·7 below the average of the preceding 10 years. The death-rate was 0·28, which was nearly 0·3 below the average of that of the large towns. The disease was most prevalent in Bootle in the first half of the year, and the months in which fatal cases occurred were January, February, March, May, June, July, and December, when 2, 3, 3, 1, 2, 1, 2, deaths respectively were registered. Unfortunately there does not appear to be any method known at the present time of preventing the spread of this infectious and fatal disease. Needless to say, if any practicable preventive means could be discovered, a large number of lives would be saved thereby.

CONTINUED FEVERS.

Typhus—A case of fever was notified in December as enteric, but on being removed to Hospital it was found after a few days to be a case of typhus. The patient's bedding, &c., was burnt, and every precaution was taken to prevent the spread of the infection.

Enteric (or Typhoid)—The total number of cases of enteric fever notified during the year was 132, this number being 55 less than in 1895, all excepting 15 being of persons aged 5 years and upwards. The number of deaths registered was 28, but 4 of these were of persons from the out-townships, so that the total number of deaths of Bootle persons was 24, or one more than in 1895. There were cases notified in each month of the year, but the largest numbers were notified in May, June, July and August, when 15, 18, 25 and 22 cases respectively were notified. The number of deaths registered in these months were 2, 4, 5 and 4 respectively, but the largest number of deaths occurred in November, the cases having evidently been of a more severe character than the previous ones. Table No. 2 shows the number of cases notified in each month, and it will be noticed that in April there were only 5 cases, and that the number of cases increased in May to 15, and dropped from 22 in August to 8 in September. The total number of deaths exceeded the average of the preceding 10 years by 4·6, which was exactly the same number as that in 1895. The death-rate 0·46 exceeded the average of "Fevers" in the 33 large towns by 0·27, and was therefore two and a half times greater. The number of enteric cases admitted into Hospital from Bootle was 78, and from the out-townships 28, 22 of which were from Seaforth; thus the total number of enteric cases admitted was 106, or 29 less than in 1895. The total number of deaths from this fever in Hospital was 15, 11 of which were of residents and 4 non-residents, the total number 15 being 14·1 per cent of the entire cases admitted, which was 0·7 per cent less than in 1895. The percentage of deaths from all the notified cases in Bootle was a little over 18, and was thus 6 per cent in excess of the cases admitted to Hospital. The percentage of the 11 deaths to the 78 Bootle cases treated in the Hospital was 14·1. If the 11 deaths of Bootle persons dying in Hospital are deducted from the total number of deaths (24) of Bootle persons dying from this fever, this will give a difference of 13 persons dying out of the 54 persons treated outside the Hospital, and the percentage of these 13 deaths to the 54 cases treated outside is therefore 24, or 10 per cent in excess of those treated in the Hospital. It is gratifying to note that the percentage of mortality from this fever in Hospital during the past year was less than that in 1895, but it is still more gratifying to note that the mortality from the cases treated in the Hospital was very much less than from the cases treated outside; this fact proves the great usefelness of the Hospital for the treatment of this fever. It must be reeollected also that the favourable result of the cases treated in the Hospital was obtained, notwithstanding that, as a rule, (as I mentioned in my last Report) a great proportion of the cases removed to Hospital are of a more serious character than a large number treated outside. Many cases indeed are not removed until late on in the attack, when serious symptoms and complications arise, and when the strength and resources of the friends nursing the patient at home are exhausted, and although under these circumstances the removal of the patient may be absolutely necessary, yet, at this period of the attack, the removal must tend to lessen the chances of the patient's recovery. On the other hand, the great disadvantages of treating enteric cases outside a Hospital, particulary amongst the poor, are that the patients are often in small and crowded houses with bad sanitary surroundings, that the nourishment given to them is very often improper or insufficient, that there is also a want of proper cleanliness and good nursing, &c. All these are very serious disadvantages. With regard to bad sanitary surroundings, I may mention the impure air that often enters dwellings from bad drainage, foul middens, and exhalations from impure soil and subsoil water. With regard to nourishment, patients are often given improper food, and the milk they receive is often sour, or contaminated with impurities it has absorbed, and the medical attendant is thus unable to rely on his instructions as to dietary being properly carried out; then also in the dwellings of the poor, the patients are hardly ever properly nursed, and they themselves, their bedding and clothing, are not kept properly clean, and they thus assist in the spread of the infection. It is sufficient to mention here, that, in my opinion, it is of the utmost importance that as many cases as possible of this fever should be removed from cottage property to Hospital as early as possible, both for the sake of isolation, and also for the reasons just mentioned. It is generally believed that enteric fever is not infectious, at all events in the proper sense of the word, but I believe for all practical purposes it is so, as I have found often that enteric fever has attacked several persons in one house successively. I believe also the evaporations from the subsoil polluted with excremental and other organic impurities, often probably containing the micro-organism of enteric fever, will in the hot weather of summer and autumn originate the fever. In my last Report I mentioned the fact that enteric fever had, 3 years in succession, appeared in a certain milk house in this Borough. I am pleased to report that this milk house appeared to be, last year, free from the "infection" of fever, as no fresh case occurred, and I believe the remedies adopted in September, 1895, were effectual in preventing a fourth recurrence. In my opinion the principal factor in obtaining this desirable result was the thorough drainage of the subsoil, and the disconnection of the terminal end of the subsoil drain, in addition to which a concrete floor was placed down under the house to prevent ground air finding its way into the house, and the space between the floors was thoroughly ventilated. I have commented rather fully on the subject of enteric fever, as it is a fever which we have to deal with carefully every year. It is invariably present in the late summer and in the autumn, and is nearly always preceded by epidemic infantile diarrhœa. When the weather is very hot the number of deaths from it is always increased, and it is one of the 7 zymotics which assists to make our zymotic death-rate larger than it should be. As, however, the number of notifications of it have decreased during the last two years, I hope that the large number of conversions of privy middens into w.c's, and the automatic flushing tanks used for effectually flushing the sewers in the Knowsley Ward, the erection of ventilating shafts,

&c., have already diminished the prevalence of this fever, and will continue to improve gradually the sanitary condition of the Borough.

DIARRHŒA.

In carefully considering this very important zymotic, I must again specially direct attention to the large number of infantile deaths that are year after year registered from this fatal disease. The mortality from diarrhœa is indeed the principal cause of our rather large infant mortality and zymotic death-rate, and if any means could be adopted to lessen the number of cases that annually occurs with the consequent mortality, our total death-rate would be considerably decreased. The disease in Bootle nearly always commences suddenly when the hot weather commences, which is generally either in June or July, and I have noticed that in Bootle it usually precedes the advent of enteric fever. During the past year only 3 deaths (all infants) were registered from it during the first 5 months, but in June the disease became suddenly epidemic (the first death occurring on the 11th), and no less than 24 deaths were registered from it, 22 of which were of children under 5 years; in July 23 deaths were registered, 21 of which were children; and in August 11 deaths occurred, 9 of which were of children. The mortality then dropped to 6 deaths in September, 3 in October, and 1 each in November and December, all these being of young children, and all these young children were under 5 years, and a very large proportion of these were infants under one year. The epidemic thus commenced a month earlier than in 1895, probably through the earlier advent of the summer heat. It was not, however, nearly so fatal as in 1895, for whereas 107 deaths, including 5 above 5 years were registered in 1895, only 72, including 6 over 5 years were registered last year, and were really 0·4 below the average of the preceding 10 years. The zymotic death-rate was 1·38 per 1000, was 0·67 less than that in 1895, and was 0·59 in excess of the average death-rate of the 33 large towns, several of which towns however had even a higher death-rate from it than Bootle. It will thus be noticed that there was a considerable decline in the mortality from this disease last year, but it must be remembered that 1895 was an unusually fatal year for infantile diarrhœa, for with the exception of the year 1893, the largest number of deaths for at least 13 years were registered from it in 1895. As in the case of enteric fever, I am strongly in hopes that the improvement with regard to the sanitary surroundings of cottage property, affected by the large conversion of privy-middens into w.c.'s had a salutary effect in diminishing the mortality from diarrhœa during last year, as there is no doubt the summer heat was at one time excessive. It is quite certain that to a large extent the mortality from diarrhœa, and the causes thereof are preventable. There is undoubtedly a great difficulty in getting careless and ignorant mothers amongst the poor to take proper precautions in preventing milk from contamination, as the milk itself so easily absorbs impurities, and when one considers how many impurities there are in a cottager's home, such for instance as are contained in unclean vessels and filthy feeding bottles, impure air, &c. it is no wonder that the mortality from this disease is high, as a large number of the mothers either do not suckle their infants at all, or only partially suckle them. I fear until some influence can be brought to bear on these women by the instruction of trained district nurses, or by sending some of these infants to créches in the day-time whilst the mothers go out to work, there is little hope of materially reducing the great mortality from this zymotic. I think it my duty to again point out the necessity that exists in Bootle for a nurse's "home," and a proper organization of trained district nurses, and I think the present year would be a very appropriate year for the start of such an institution. With regard to the sanitary surroundings of the cottagers' homes, however, something can be done and undoubtedly is being done in this borough, so as to enable the poor children in their crowded homes to breathe pure air, free from organic emanations when the windows and doors are opened. I must again repeat that epidemic diarrhœa is a disease of which there is no reasonable doubt as to its origin, this being a micro-organism, which according to the late Dr. Ballard resides primarily in dead organic matter in the soil, and at a temperature of 56° at a depth of 4 feet below the surface of the earth, gets away from the soil, becomes "air-borne," and then fastens on and pollutes milk and other forms of food, which when taken into the body act like a poison in the system. On comparing the origin of diarrhœa and enteric fever there has appeared to me for some years past a great similarity, they both have their origin in a micro-organism which can be taken into the body through food, especially milk, both are diseases of the intestinal canal, both are connected with foul air from sewers or accumulations of filth, and both occur in the hot weather of summer and autumn when putrefaction and decomposition go on rapidly. Although this similarity of origin thus appears to exist, and although enteric fever is often preceded by epidemic diarrhœa I found in a conversation I had many years ago with the late Dr. Ballard during the time in fact when he was preparing his report to the Local Government Board on the causation of the disease, that he was positive in his opinion that the two diseases were distinct, and had a separate origin.

CHOLERA.

With regard to this disease I have to report the same as I did last year, viz., that during the past year no case was notified, nor was any suspicious case reported.

INFLUENZA.

There was no epidemic, nor was there any marked prevalence of this disease, at any time during the year. One death was registered in June, said to be due to "influenza and acute phthisis," which I presume must have been a death of a phthisical person, who was attacked and carried off by influenza. In 1895 there were 12 deaths directly attributable to influenza, but there is no doubt the prevalence and baneful influence of this disease in 1895, increased the mortality from diseases of the lungs and also pulmonary phthisis, because 276 deaths were registered from the former, and 68 from the latter, as contrasted with 212 and 59 respectively in 1896. Thus the non-prevalence of influenza last year must have had a beneficial effect in lessening our mortality statistics. Experience has proved that influenza is very infectious even in its early stage, and that the measures that are usually preventive in other zymotic diseases, are of little or no avail against influenza.

PUERPERAL FEVER.

From some cause not discovered, there were during last year 5 more deaths from this fever than there were during 1895, although the deaths from " diseases of the uterus and child-birth " were only 9 as compared with 13 in 1895, and the deaths from erysipelas (4) with which disease puerperal fever is supposed to have some connection, were only 3 more than in 1895. It appears, however, that the notifications of erysipelas which numbered 45 in 1895, increased in 1896 to 62.

OTHER ZYMOTICS.

The deaths from zymotic diseases of minor importance to those already commented on were as follows :—rheumatic fever 3, syphilis 1, pyæmia and septicœmia 4.

DISEASES OF UNCERTAIN OR VARIABLE SEAT.

The deaths from these diseases numbered 43, all being of persons over 5 years. The total number was 12 over that occurring in 1895, and of this number 35 were of persons who died from cancer, an increase of 13.

DISEASES TUBERCULAR.

The total number of deaths registered in Bootle from this class of diseases was 89, this number being 13 below that registered in Bootle in 1895. Of these 59 (a decrease of 9) were due to phthisis, 20 to tabes mesenterica, and 10 to tubercular meningitis. There were also 13 deaths from phthisis in the workhouses, but 2 persons died from phthisis in Bootle "not belonging thereto," so that the total number of deaths of Bootle persons during the year ought to be really just 70, a favourable contrast to that in 1895 which was 84. It is therefore satisfactory to note that the number of deaths from phthsis in Bootle has decreased during the last two years, and I am of opinion that if Sanitary Authorities were allowed greater powers by legislation to check this fatal disease, the number of deaths throughout the country would be greatly diminished. At present there is no compulsory power to make the owners of property disinfect houses or rooms where deaths have occurred from this disease. The Sanitary Authority in Bootle will carry out, free of cost, disinfection if requested to do so, but few persons have availed themselves of such a liberal offer. It is generally acknowledged that the infective material (bacillus) from a "consumptive" patient is in the expectoration, and when the sputum gets dried, it may retain its infective power for long periods; after a time it becomes pulverized, is blown about in the form of dust, and infects healthy persons both in houses and even in streets where phthisical persons are in the habit of expectorating. It is said that numerous instances have occurred of the infection of whole groups of people, free from all hereditary taint, by mere residence in rooms or houses which had been previously occupied by persons suffering from tubercular disease. To avoid the dissemination of this disease, therefore, it will be seen how necessary it is to destroy sputum, and not allow consumptive persons to expectorate on the floors of factories, workshops, dairies or bakehouses; indeed, I believe no person known to be afflicted with this disease ought to be allowed either to milk or make and bake bread, and no infected person ought to be allowed to smoke in places where food of any kind is prepared. The slaughtering of animals and the dressing of the meat should always be done under skilled supervision, with the object (according to Dr. Sydney Martin, a scientific expert) of securing the removal and destruction of every part of a carcase that contained any tubercle whatever, and also the destruction of the whole carcase in cases where the animal was found to have advanced or generalised tuberculosis. I believe that every animal that shows signs of tuberculosis, even if diseased internal organs have been removed, should be condemned, for, even although the flesh may be cooked, it may not be cooked so thoroughly as to avoid the possibility of the bacillus being introduced into the body, for tubercle may be deposited in the intermuscular fat, and escape ordinary observation. I am also of opinion that no milk from a cow known to be tuberculous ought to be allowed to be sold, for it often contains the bacillus, even if the udder and teats are free from the disease, and I believe many a child has wasted away and died from drinking milk supposed to be pure and free from infection. It is fortunate that the danger of tuberculor infection by milk is obviated by boiling, and this precaution should always be adopted when it is used for the feeding of children. In several cities and towns, notably Glasgow, Sheffield and Bournemouth, leaflets have been distributed in order to educate persons on this subject and enable them to take the necessary precautions against the infection of consumption. I believe such leaflets might be usefully distributed in Bootle, particularly in workshops, factories, &c. It has been suggested also, that preventive measures may be usefully and economically taken by agriculturists in isolating sound stock from the intrusion of tuberculous animals, and so preserve the herd from the chance of infection. When no external signs of tuberculosis are present, some persons have even proposed that all cows supplying milk to a community should be subjected to the tuberculin test. The danger of tubercular infection is, in my opinion, so much greater than is generally supposed, that in commenting on this class of diseases I have entered into the precautions to be adopted and the legislation required, in rather a lengthened manner, as I am in hopes, that by doing so, I may assist in arousing public interest in this important matter.

DISEASES OF THE BRAIN, SPINAL MARROW, &c.

The number of deaths registered from this class of diseases was 133, of which 73 were of children under 5 years of age. The total number was 36 more than in 1895, and the number of children was 21 more than in 1895. The deaths of infants registered under the unsatisfactory term of "convulsions" was 37, and this also was an increase of 16.

DISEASES OF HEART AND BLOOD VESSELS.

The number of deaths registered from these diseases was 42, which number was very nearly the same as that in 1895. Seven deaths however occurred in the Workhouses.

DISEASES OF THE LUNGS AND AIR PASSAGES.

The total number of deaths from these diseases was 212, which number was 64 less than that in 1895. Of the total number, 113 were children under 5 years. The number of deaths from this class of diseases was therefore much less than in the previous year, and no doubt the absence of influenza had something to do with this diminution. The largest number of deaths occurred in January, February, October, November and December, when 28, 21, 24, 23 and 22 deaths, respectively, were registered. As, however, 21 Bootle persons died in the Workhouses and therefore out of the district, and 4 died in Bootle not belonging thereto, the difference (17) ought to be added to the 212 registered in Bootle and thus increase the total mortality from these diseases to 229, a favourable contrast to the total mortality in 1895, which was no less than 309.

OTHER DISEASES.

The deaths from "other diseases" in 1896, when compared with those in 1895 were as follows:—Diseases of kidneys, bladder, &c. 21, a decrease of 8; diseases of uterus, child-birth, &c., 9, a decrease of 4; diseases of stomach, liver, &c., 71, an increase of 12. It will be noticed that under this last-named heading 11 deaths were registered from "enteritis," and 11 from "gastro-enteritis," and of the 22 deaths from these 2 diseases 20 were of children under 5 years. Probably the majority of these 20 deaths should have been included with those from diarrhœa. In addition 6 deaths were registered from diseases of the bones, &c., 1 from diseases of the skin, 1 from malformations, 36 from premature birth (same number as in 1895), 32 from atrophy and debility, and 10 from old age and natural decay. The deaths of 16 persons (same number as in 1895) were registered during the year, aged 80 and upwards, viz.:—3 in January, 2 in February, 3 in April, 1 in May, 2 in June, 1 in July, 1 in August, 1 in October, 1 in November, and 1 in December. Of these 16 old persons 3 died aged 80, 2 aged 81, 2 aged 82, 3 aged 83, 3 aged 84, 1 aged 85, 1 aged 86 and I aged 89. In addition to these old persons who died in Bootle, 2 old Bootle persons died in Walton Workhouse, 1 aged 81, and 1 aged 86. With regard to these old persons I must make the same remark as I did last year, viz., that unfortunately one cannot always depend that the friends of these old people register their deaths correctly, although I believe from my experience that as a rule the age is more often under stated than the reverse.

DEATHS THROUGH VIOLENCE, &c.

Seventy-five deaths through violence, &c. occurred during the year, being a decrease of one, when compared with the number from the same cause in 1895. In addition to these deaths, 5 deaths were registered from "natural causes," the precise cause not being shown. Of the 75 deaths 16 were of children under 5 years of age, and the causes of these deaths were as follows:—44 (an increase of 6) were due to *injuries* either from accidents or negligence, 10 were from "*drowning* or *effects of immersion*" 6 were from "*burns*" or "*scalds*," 3 were from "*suffocation*," 5 were from "*suicide*," 1 from "*excessive drinking*," 2 from "*mal-nutrition*," 1 (an infant) from "*neglect and exposure*," and 3 persons were "*found dead*," the cause being not clearly proved. For the last 3 years there have been exactly the same number of deaths, viz., 44, that were "*uncertified*" by any medical practitioner, but as the total number of deaths during last year was smaller than in 1895, the percentage of these deaths was slightly larger, being about 4·4 per cent, and of the total number 26 (instead of 19) were of children under 5 years of age.

INQUESTS.

The number of inquests held during the year was 80, a decrease of 4 when compared with the number in 1895. The number of inquests in each month was as follows:—January 12, February 7, March 8, April 5, May 8, June 6, July 5, August 2, September 7, October 4, November 10, December 6. It will thus be seen that about 7·8 per cent of the deaths in this borough formed the subject of legal inquiry.

HORSE AMBULANCE FOR ACCIDENTS, &c.

This ambulance carriage, presented to the Bootle Borough Hospital in 1889 is used entirely for the removal of accidents and other urgent cases to the Bootle Borough Hospital. During the 8 years it has been in use it must have saved an immense amount of suffering and probably many lives. It is worked by the members of the Fire Brigade who have nearly all passed the necessary examination and have become members of the St. John's Ambulance Association. Through the training these men have received and their knowledge of rendering "first aid" to injured sufferers, and also to the rapid and easy manner these sufferers can be removed, it has not been thought necessary to send a house surgeon to accompany the ambulance, as it is worked in the same expeditious way as an engine is worked when turned out to a fire, and can be sent out in *less than a minute* after an alarm has been given. To show the usefulness of this invaluable carriage and the serious nature of the accidents, &c. removed, I will briefly mention the following facts as reported to me by Mr. Roberts, the Superintendent of the Brigade. "During the year the ambulance has turned out to no less than 484 cases, 337 of which were between 6 a.m. and 6 p.m., and 146 between 6 p.m. and 6 a.m. The accidents and urgent cases were as follows:—91 compound fractures and 115 simple fractures, 77 wounds, 45 fits, 23 scalds and burns, 5 dislocations, 5 drowning and 4 poisoning cases, 1 dog-bite and other injuries 118."

HORSE AMBULANCE FOR INFECTIOUS CASES.

Besides the ambulance for infectious cases that has been in use for some years past, the Corporation in March of last year ordered from Messrs J. McDowell & Co., another ambulance carriage to be used entirely for the removal of typhoid (or enteric) cases. This carriage was built on the same lines as that for the Bootle Borough Hospital, except that the framework of the typhoid one is of ash, instead of oak, the effect of which to make the carriage lighter. The wheels of the new carriage are also very light and are fitted with india-rubber tyres, 2 inches thick, which enables the van to run more smoothly. After the purchase of this ambulance it was considered necessary in order to facilitate the removal of enteric patients, to lower the floor of the carriage and to make certain other alterations. The total cost in consequence amounted to £86 10s. 0d.

PUBLIC BATHS AND GYMNASIUM.

As I am of opinion that Public Baths are very essential to the health and comfort of the inhabitants of a large town like that of Bootle, I am always glad to find that the public has largely availed themselves of the benefit to be derived from their use, such as I find has been the case during the past year. The Gymnasium ought also to be encouraged. I now therefore submit the report of the Manager Mr. MacMahon.

Baths—During the year 1896 the baths were largely utilised, the number of attendances of the bathers being 70,288. Of course the baths are used much more freely during the summer months than they are during the winter season. The average weekly attendance for the summer months (April to September) was 2,449. Considering these baths are made warm and comfortable during the winter season by steam passing through pipes in the dressing boxes, it would doubtless be conducive to the health of many people of the borough, if the baths were more frequently used during the winter season. The salt water supplied to the baths is of excellent condition. The receipts from the baths for the year were £921 5s. 1d. The number of attendances of the bathers during the four quarters of the year were as specified below :—

Quarter ending	March ...	Males	2,437	Females	60	Total	2,497
,,	June ..	,,	30,617	,,	4,799	,,	35,416
,,	September	,,	23,580	,,	4,672	,,	28,252
,,	December	,,	4,009	,,	114	,,	4,123
Totals for the year, 1896...			60,643		9,645		70,288

Gymnasium—The numbers enrolled in the several gymnastic classes from 1st October to 31st December, 1896, were gentlemen's class 88, boys' class 34, ladies' classes 173, school children's classes, 179—total 466. All the classes continue to be well attended, the lighter exercises are much enjoyed, and are of considerable benefit in developing and bracing up the physique of the young people. The receipts from the gymnasium from 1st October to 31st December, 1896, were £81 3s. 2d. I may here mention that during the year the Corporation determined to erect " an open air public bath" for the benefit of the poorer class of inhabitants, and had chosen a site for its erection, when on a petition of an influential number of the inhabitants in the vicinity of the proposed bath, the erection of it was disallowed by the Local Government Board.

SANITARY WORK.

A large amount of sanitary work was accomplished during the year as Table No. 5 containing the Sanitary Inspector's Report will fully show. As previously stated a case of smallpox was discovered in October but was so promptly and efficiently dealt with, that no spread of the infection resulted. It must be remembered also that 297 scarlatina and 132 enteric, cases, besides other cases of an infectious or contagious character, had to be thoroughly investigated and dealt with, and this is carried out in the following manner:—On receiving a notification of a case of Infectious Disease, the house and premises are visited by a qualified sanitary inspector, and a thorough examination is made of the sanitary arrangements of the house. It is thus ascertained whether the patient is properly isolated, and if he (or she) is not, it is recommended that the case be removed to the Corporation Hospital at Linacre. The names of all children in the house attending school, and also the places of employment of the members of the family are also obtained, and the School Board Authorities, and the Employers are, respectively, communicated with. The Librarian at the "Free Public Library" and the House Surgeon at the Bootle Borough Hospital, are also made acquainted with all cases of Infectious disease, notified to me. At the present time I am informed that books returned from infected houses are always destroyed. The number of books destroyed during 1896 was only 15, but I would suggest that at least some of these books might be sent to the Infectious Hospital. The source of the milk supply is also obtained and a printed copy of "suggestions for the prevention of Infectious Diseases" is left with the family. When scarlatina or smallpox occurs in milk houses the patient or patients are immediately removed to Hospital, all milk on the premises is destroyed, the person or persons engaged in the trade go to lodgings and are not allowed any communication with the house for a fortnight; every article of a cotton, linen cloth, or woollen nature, (in fact everything that can be so treated) is disinfected by heat. The walls and ceilings of the house are thoroughly stripped and cleaned, and the water supply is carefully examined. To make sure that no fresh case occurs, the premises are also daily visited for 3 weeks after the outbreak. During the year 387 houses were disinfected, and in each case notices were sent to the owners to cleanse the infected rooms. Of this number 16 were cleansed by the Local Authority, under the Infectious Diseases (Prevention) Act, 1890, the owners having failed to comply with the notices served on them. This work entailed 931 inspections. Disinfectants were taken to each infected house immediately on the notification of the disease.

NUISANCES.

During the year nuisances were reported to exist in 2,301 private houses. Of this number 344 houses were inspected by special request of the tenants. The nuisances dealt with include defective drainage, water-closets, sinks, bath and wash-basin waste-pipes, roofs, downspouts, yard surfaces, ventilation, filthy houses, accumulations of filth, manure, stagnant water, and other refuse, fowls and animals improperly kept. Re-inspections of these houses and premises were made and the necessary steps taken to abate the nuisances. Owners were summoned in 6 instances for non-compliance with notices.

COMMON LODGING HOUSES.

The Chief Sanitary Inspector reports that the number of these houses registered in Bootle under the Public Health Act, at the beginning of the year was 192, and that the number of houses newly registered during the year was 35, but it appears that 71 houses were vacated by the keepers. so that the number of houses now on the register is 156. The Inspector also reports that the number of day and night inspections were 1,881, and that the number of infringements of the bye-laws was 152, of which 9 were brought before the magistrates.

INSPECTIONS OF DAIRIES. COWSHEDS, AND MILK-SHOPS.

The number of person on the register for the sale of milk during the year was 129. The number of inspections made was 568. Number of notices served for defects found to exist was 110, and the number of dairies. in which fever occurred during the year was 3. In May last, accompanied by the two sanitary Inspectors, I visited. and inspected all the cowsheds in the Borough. I found there were 39 cowsheds or ("shippons") altogether, and speaking generally we found them in a fairly good condition. The principal imperfections noted were as follows:- 6 of the cowsheds contained more cows than are allowed by the regulated cubic feet of space. In these 6 cowsheds the number of cows found in excess of the number allowed, were 1, 1, 1, 2, 2, 4, respectively, the total number therefore being only 11. In 7 instances we found the light and ventilation, in our judgment, deficient. It is impossible in my opinion to exaggerate the importance of enforcing strict obedience to the proper regulations with respect to dairies and cowsheds, with the view of preventing milk from being contaminated with impurities, particularly in a Borough like Bootle, in which, more or less infantile diarrhæa, and autumnal enteric fever, is always prevalent in hot weather. The great power of absorbing impurities that milk possesses is well known, and therefore when the air of cowsheds becomes polluted, through want of proper ventilation, and in consequence contains large numbers of micro-organisms, these are absorbed by the milk, causing it to ferment and decompose, and so produce gastric disturbance and diarrhœa, particularly in infants. Defective ventilation will also cause tuberculosis in cows, which disease will spread from one to another, and the animals thus affected will supply milk conveying this disease to human beings. Cleanliness of the milkers' hands, and of the udders, and teats of the cows, and of the vessels containing the milk, ought also to be strictly supervised.

INSPECTION OF BAKEHOUSES.

I make an inspection of all the bakehouses in the Borough every year. Last year I made this inspection on the 26th August, and was accompanied by the two sanitary inspectors. I found 35 bakehouses in use, and 7 not used. A great many of them required cleansing and limewashing, and the floors of many of them were "caked" with dried flour, and required to be properly scraped and cleansed. We carefully noted the water-supply and ventilation, and that every bakehouse was free from effluvia, from drains, privies and other nuisances.

WORKSHOPS.

Mr. Inspector McCulloch is intrusted with the responsible duty of visiting and inspecting the workshops during the year. He reports that the number of workshops on the register last year was 97, an increase of 24 when compared with the previous year. As the result of his inspections, 51 defects were reported during the year, and remedied. The defects were of the usual character, viz.: - overcrowding, and want of proper ventilation and cleanliness.

FOOD INSPECTIONS.

During the year several seizures of unsound food were made, the total amount seized being about 29,329 lbs. The particulars of the prosecutions are as follows:—

6 rabbits (24 lbs.) from shop in Marsh Lane.

60 lbs. meat from a shop in Derby Road.

2½ lbs. meat from a shop in Irlam Road.

27,954½ lbs. of unsound food, and also 134 turkeys, weighing 11½ cwt., have been destroyed by consent of the owners, without the formalities of a magistrate's order.

INSPECTION OF CATTLE SHIPS.

These inspections are made by Assistant Inspector Owens, the most important part of which is the inspection of the "cattle fittings," for if these are not properly cleansed and disinfected, cattle disease might easily be introduced amongst the flocks and herds in the interior of the country. During the year 622 of these inspections were made. 2 infringements were reported, and in one case legal proceedings were taken and the responsible person was fined.

INSPECTIONS OF CANAL BOATS.

Inspections of canal boats have to be made in Bootle because the Leeds and Liverpool Canal runs through the Borough, although Bootle is not really a registering district. These inspections are made by Assistant Inspector Owens, under the direction of the Chief Sanitary Inspector. During the year 178 inspections were made. 12 infringements were reported, and notices sent to the owners and masters, who have in each case remedied the defects reported.

SYSTEMATIC INSPECTIONS.

During the year a large number of systematic house-to-house inspections have been made by the Sanitary Inspectors, and when I have considered it necessary, I have accompanied the inspectors in these inspections. The inspections I have thus made have been principally in reference to the sanitary defects of the cottage property, and notably the condition of the privy-middens. 565 of these receptacles of filth have been converted into w.c.'s during the year, and a large number are now in the process of conversion. I have also, at various times, made other inspections when insanitary conditions of property, &c., have been reported to me; and (as already stated) have inspected all the bakehouses, cowsheds, slaughter houses, and some of the workshops. The results of these inspections I have duly reported to the Health Committee. The Borough Surveyor informs me that the total number of privy-middens converted into w.c.'s since February, 1893, and up to the end of last year, has been about 3,300.

THE DESTRUCTOR.

A large quantity of refuse matter amounting 11,109 tons has been burnt during the year, and has thus been of immense service, for the quantity burnt exceeds that of last year by about 4,770 tons. The remainder of the refuse matter principally excremental, has been disposed of to farmers at a small profit and sent into the rural districts by canal boats. The number of ashpits emptied during the year was 39,630. The number of boat loads of refuse sent off was 124, and as each boat can carry on an average about 48 tons, the number of tons sold to farmers was 5,952. The clinkers remaining after the burning of the refuse (which by the cremation is effectually disinfected and rendered innocuous) are used for making foundations of roads, and when ground down into a mortar-mill, are by a special process converted into concrete flags and are now being extensively used for paving, having been found quite as hard and durable as the paving stones commonly used.

WATER SUPPLY.

Table No. 8 gives the quarterly analysis of the soft and hard waters supplied by the Liverpool Water Committee to Bootle and other districts. The Bootle Wells having been permanently closed, and the pumping machinery removed, Bootle necessarily has a much larger quantity of soft water supplied than was supplied formerly. We are not informed as to the exact distribution of these waters, and as the Liverpool Water Committee have practically the entire control of our supply we have therefore to trust to them that the water supplied to us, especially in the summer and autumn months, is a wholesome and uniform one.

FLUSHING.

The water used for this purpose is principally salt, and during the year 5591 drains of private houses were flushed. A large number of *automatic flushing tanks* are fixed to passage sewers at the north end of the borough notably in what is known as the "Bootle hall estate." The capacity of these tanks is between 250 and 300 gallons, they do their work remarkably well, most effectually flush the sewers, and being situated below the flags cannot very easily be tampered with by ignorant and mischievous persons.

THE DERBY PARK.

This new park has been visited during the year by a large number of people, and in the summer and autumn months, it has often been crowded. The ornamental lake afforded great amusement through the sailing of model yachts, and the flower-beds, bowling green, &c. have been carefully supervised by the gardeners and park keepers. As the trees and shrubs increase in size, so the beauty of the park generally must increase, and the park will become more attractive every year. I may remark that besides this park there are at the north and south of the borough two other parks, which really are more in the form of recreation grounds where cricket and other sports are indulged in. There is no doubt that parks and recreation grounds largely conduce to the health and physical stamina of children and young people, especially those of the poorer class of inhabitants, for in these open spaces the children can get away from the close over-crowded rooms of their homes, and can play in safety in pure air. Adults also who have been prostrated by sickness can stroll about and sit down when fatigued, and by enjoying the fresh pure air and change of scene, they thus hasten their complete convalescence. I think the Corporation is to be congratulated on having provided these very desirable open spaces for health and recreation, and that the money for the defraying of the necessary expenses has been well spent.

ADULTERATIONS.

Sale of Food and Drugs Act.—The Chief Constable (Mr. James Cumming) and Inspectors Leslie and Ferguson have the carrying out of this act during the year. Table No. 7 gives the number of samples taken and sent to the public analyst, and also the descriptions of the food, &c. submitted for analysis, the result being that out of 102 samples taken, 4 persons were proceeded against for adulterations, 3 being convicted and 1 discharged.

SANITARY PROCEEDINGS AND ADVICE, &c.

In accordance with Act 14, Section 4, of the Local Government Board's Order, I will now refer to "Proceedings relating to conditions dangerous or injurious to health, in which I have taken part or advised" the Sanitary Authority during the year. As in former years, I have reported regularly every fortnight during the past year on the vital statistics of the Borough, the sanitary requirements and the work accomplished, together with special reports when necessary. The sanitary proceedings have been fully commented on in the previous part of this Annual Report, and I therefore think it is unnecessary for me to make any further remarks on this subject, in this concluding paragraph. I am pleased to be enabled to show the improved sanitary condition of the Borough during the past year through this Annual Report, as the death-rate decreased from 21·55 in 1895 to 20·13 per 1,000 in 1896. The most important sanitary proceeding in which I took part during the year was the inquiry held in the Town Hall, on the 20th May, by the Local Government Board's Inspector, Fred. H. Tulloch, Esq., C.E., with regard to an appeal by certain owners of property against the compulsory payment of the cost of the conversions of privy-middens into w.c.'s. The appeal was made under section 268 of the Public Health Act, 1875. Both the Corporation and the appellants were represented by learned Counsel, and copious evidence was taken on both sides. After a considerable delay the Local Government Board decided that each side should pay half the cost of these conversions, but the Board stated that they had no power to order the return of half the cost of sums already paid by other owners of property previous to the appeal. The Corporation, however, considering that by this decision of the Local Government Board they are in justice bound to refund half the cost of all sums previously paid for these conversions, are endeavouring to obtain the necessary power to enable them to do so. The Health Committee still think they ought to continue to order the conversion of these middens when they are found to be in an insanitary condition, and, in my opinion, detrimental to health. Conversions are therefore still going on, as already shown by the large number converted during the year.

In January I inspected some premises in Park Street, in which the manufacture, on a small scale, of a kind of soap was being carried on. The articles used I found to be principally a specially prepared cocoa-nut oil fat, soda and salt, and I saw specimens of the cocoa-nut oil fat and the manufactured article, which appeared to be inodorous. I reported that as long as the articles used were such as I saw, I was of opinion that the business could be carried on without being a nuisance. Permission was then given by the Health Committee, under agreement, and no complaint has since been made of a nuisance arising from these premises.

On the 28th April I inspected the house No. 27, Dundas Street, and found it to be in such a wretched condition on account of extensive dilapidations, that I certified it was unfit for human habitation.

On the 9th June, accompanied by two sanitary inspectors I made an inspection of some premises in Berry Street, where I found bone-boiling going on. There was also on the premises a quantity of bones which had not been boiled, and these together with the bones that were being boiled, caused a most offensive smell, which was plainly perceptible in the adjacent street. The offender was prosecuted and fined, and on a repetition of the offence, he vacated the premises and gave up the business.

On the 29th June, I suggested to the Health Committee the desirability of an inspector visiting every house where a fatal case of diarrhœa had occurred, in order to ascertain whether sanitary imperfections could be found and rectified. and also to inquire into the milk supply, &c. The Committee acted on my suggestion, and in consequence every house was visited where a fatal case occurred.

On the 5th October after the receipt of " a copy of extracts from the annual report of the Medical Officer to the Local Government Board," I made a special report to the Health Committee with reference to my opinion as to the infectious character of measles and the means to be taken for the prevention of the spread thereof. My remarks on this subject will be found under the heading of "measles."

On the 27th October I had to make a special report to the Health Committee on the sanitary condition of Knowsley Ward, in order to contradict most erroneous and injudicious remarks made previously in a public meeting to the effect that this ward was in a most unhealthy condition, and contained a large number of cases of fever, diphtheria, &c. By quoting the number of notifications and deaths in this ward for 3 consecutive years, I was enabled to entirely disprove these statements and I hope to stop the dissemination of them in future, for necessarily nothing tends to do more injury to any locality than the propagation of erroneous reports as to its sanitary condition.

On the 11th December, accompanied by the chief sanitary inspector, I inspected the soap works in Brookhill Road, called the "Cherub Soap Works." I found that these works were not then in thorough working order, although they were making a certain quantity of soap. The materials said to be solely used in making this soap were shown to me and I advised the Committee that if the company continues to use the same quality of ingredients they were then using, I saw no reason why the trade should not be inoffensively carried on. The company, however, should be strictly restricted to soap-boiling as distinguished from fat purifying. The latter branch of the business which of late years has become a separate and distinct trade, should on no account be sanctioned.

During the year I have reported on a few other subjects but they have either been mentioned in the previous part of this annual report or they are not of sufficient importance to mention here.

R. J. SPRAKELING,
Medical Officer of Health.

15th March, 1897.

A. *TABLE OF DEATHS during the Year 1896, in the Urban Sanitary District of Bootle (County Borough): classified according to* DISEASES. AGES, *and* LOCALITIES.

NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shown as separate localities. (*Columns for Population and Births are in Table B.*)	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.								MORTALITY FROM SUBJOINED CAUSES. DISTINGUISHING DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																					
													FEVERS.																	
	At all ages.	Under 1 year.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards		Smallpox.	Scarlatina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid	Continued	Relapsing	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa & Dysentery	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia and Pleurisy	Heart Disease.	Influenza.	Injuries.	All other Diseases.	Total.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
WARDS.								Under 5		2										6		18		3	27			3	48	107
Derby	203	69	38	10	11	47	28	5 upwds		1							1					2		16	27	6		2	41	96
								Under 5		1	2			2					1	7	5	27		1	48			2	87	183
Knowsley	339	122	61	19	14	91	32	5 upwds		2				9			2		2	1	2	3	3	20	27	13		4	68	156
								Under 5		1	1	3								13	7	21		3	35			2	103	189
Stanley	354	130	59	22	11	99	33	5 upwds			1	1		2			3		1	1		1		13	29	17	1	5	80	165
PUBLIC INSTITUTIONS:								Under 5																	2			5		7
Bootle Borough Hospital	73		7	5	10	47	4	5 upwds																3	4	5		36	18	66
								Under 5		14	2	1													1				2	20
Corporation Hospital for Infectious Diseases	41	1	19	5	3	13		5 upwds		2	1			15															3	21
								Under 5																				1	2	3
Mortuary	16	2	1	1	1	9	2	5 upwds																		1		10	2	13
								Under 5		18	5	4		2					1	26	12	66		7	113			13	242	509
TOTALS	1026	324	185	62	50	306	99	5 upwds		5	2	1		26			6		3	2	2	6	3	52	97	42	1	57	212	517

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

Deaths occurring outside the district among persons belonging thereto.								Under 5												3	1				2				3	9
	79	3	6		4	44	22	5 upwds																13	19	7		1	30	70
Deaths occurring within the district among persons not belonging thereto								Under 5		3															1			4	2	10
	58	1	9	2	8	33	5	5 upwds						4										2	3	1		27	11	48

R. J. SPRAKELING. *Medical Officer of Health,*
15th March, 1897.

Area and Population of the District or Division to which this Return relates
Area in Acres, 1,590. Population (1891) 49,217. Estimated (1896), 52,000.

Death Rates—General 20·13 per 1,000 Population. Infants 184·2 per 1,000 Births Registered.

B. *TABLE OF POPULATION, BIRTHS, AND NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1896, in the County Borough and Urban Sanitary District of Bootle: classified according to Diseases, Ages and Localities.*

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shewn as separate localities.	POPULATION AT ALL AGES.		Registered Births.	Aged under 5 or over 5.	NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.													NUMBER OF SUCH CASES REMOVED FROM THEIR HOMES IN THE SEVERAL LOCALITIES FOR TREATMENT IN ISOLATION HOSPITAL.											
									FEVERS.													FEVERS.							
	Census 1891.	Estimated to middle of 1896.			Smallpox.	Scarlatina	Diphtheria	Membranous Croup.	Typhus	Enteric or Typhoid.	Continued	Relapsing	Puerperal	Cholera.	Erysipelas		Totals.	Smallpox.	Scarlatina	Diphtheria	Membranous Croup.	Typhus	Enteric or Typhoid	Continued	Relapsing	Puerperal	Cholera	Erysipelas	Totals.
(a)	(b)	(c)	(d)	(e)	1	2	3	4	5	6	7	8	9	10	11	12	13	1	2	3	4	5	6	7	8	9	10	11	12
WARDS.																													
Derby	49,217.	52,000.	1,759.	Under 5		29				4					2		35		12				1						13
				5 upwds.		49	3			17			3		10		82		35				13						48
Knowsley				Under 5		37	2	2		7					3		51		21	1			4						26
				5 upwds.	1	76	3			71			3		26		180	1	40	1			35						77
Stanley				Under 5		37	2	4		4							47		19	2			1						22
				5 upwds.		69	7		1	29			6		21		133		33	4		1	24						62
TOTALS in BOOTLE	49,217	52,000	1,759	Under 5		103	4	6		15					5		133		52	3			6						61
				5 upwds.	1	194	13		1	117			12		57		395	1	108	5		1	72						187
Seaforth				Under 5															8	1			1						10
				5 upwds.															18				21						39
Waterloo				Under 5																									
				5 upwds.															2				1						3
Litherland				Under 5															1										1
				5 upwds.															9				3						12
Crosby, including one from Thornton				Under 5																									
				5 upwds.															2				2						4
Totals from the out-townships				Under 5															9	1			1						11
				5 upwds.															31				27						58
TOTALS	49,217	52,000	1,759	Under 5		103	4	6		15					5		133		61	4			7						72
				5 upwds.	1	194	13		1	117			12		57		395	1	139	5		1	99						245

Notification of Infectious Diseases in the district was adopted 1st June, 1891. *The Corporation Hospital for Infectious Diseases, Linacre, is situated in Derby Ward.*

TABLE No. 1—Tabular Statement of the number of *Births* and the number of *Deaths* and *Infant Mortality* in each Month in 1896, comparing these numbers with those in 1895; also the Percentage of Deaths under 5 Years to total Deaths in 1896.

	BIRTHS.			DEATHS.			DEATHS	INFANT MORTALITY			INFANT MORTALITY, 1895.	
	1896.		1896. Total.	1896.			1895.	1896.		Percen'ge of Deaths under 5 Years to Total Deaths.	Under 1 Year.	1 Year and under 5Years
	Males.	F'males		Males	Females.	Total.	Total.	Under 1 Year.	1 Year & under 5.			
January	77	91	168	45	46	91	81	25	22	51.64	17	13
February	66	69	135	37	38	75	100	15	15	40	21	15
March	79	63	142	47	36	83	106	25	19	53.01	37	12
April	75	64	139	44	38	82	71	28	14	51.22	23	13
May	72	72	144	28	33	61	71	15	9	39.34	14	15
June	76	70	146	62	55	117	84	53	16	58.97	26	12
July	69	74	143	50	53	103	133	32	21	51.45	75	25
August	67	66	133	49	32	81	95	31	12	53.08	39	20
September	72	60	132	39	36	75	83	29	15	58.66	22	21
October	93	83	176	43	34	77	86	22	16	49.35	23	13
November	74	69	143	46	49	95	77	27	11	40	21	10
December	87	71	158	43	43	86	88	22	15	43.02	17	19
	907	852	1759	533	493	1026	1075	324	185	49 61	335	188

TABLE No. 2—Number of Infectious Cases notified to Sanitary Authority in each Month of 1896.

Diseases.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Total
Small-pox	—	—	—	—	—	—	—	—	—	1	—	—	1
Scarlet Fever	16	24	22	7	28	29	20	31	38	41	28	13	297
Diphtheria	3	3	2	1	2	4	1	—	—	1	—	—	17
Membranous Croup	1	—	—	2	1	1	1	—	—	—	—	—	6
Typhus	—	—	—	—	—		—	—	—	—	—	1	1
Enteric (or Typhoid)	7	6	4	5	15	18	25	22	8	13	6	3	132
Puerperal Fever	2	1	—	1	—	2	2	—	3	–	1	—	12
Erysipelas	7	4	4	3	6	7	—	4	4	10	5	8	62
Totals	36	38	32	19	52	61	49	57	53	66	40	25	528

TABLE No. 3—Shows the number of Deaths from the Seven Principal Zymotic Diseases in the Ten Years, 1886 to 1895 (inclusive) and in the Year 1896.

DISEASES.	1886.	1887.	1888	1889.	1890	1891.	1892.	1893.	1894.	1895.	An'al Av'ge of 10 Years, '86-95	Total Deaths in 1896.	Do after d'dtg & add'g Dths from outside and inside Borough
Small-pox	—	—	—	1	—	—	—	4	—	2	.7	—	—
Measles	20	33	14	30	16	35	7	24	15	2	19.6	28	31
Scarlet Fever	29	26	18	8	27	31	32	20	36	13	21	23	20
Diphtheria	7	10	7	12	6	7	14	3	5	12	8 3	7	7
Cont'd Fevers Typhus	—	—	- -	3	1	—	1	—	—	–	.5	—	—
Enteric or Typh'd	11	8	19	17	8	13	16	46	33	23	19.4	28	24
Simple Continued	—	—	—	—	2	1	–	—	—	—	.3	–	—
Whooping Cough	18	32	13	20	50	35	6	34	23	26	25 7	14	15
Diarrhœa	84	80	51	74	61	52	40	131	45	106	72 4	72	72
Totals	169	189	122	165	171	174	116	262	157	184	170.9	172	169

TABLE No. 4—Summary of Causes of Deaths during the year 1896.

1896. NAMES OF DISEASES.	JAN.		FEB.		MAR.		APR.		MAY.		JUNE.		JULY.		AUG.		SEPT.		OCT.		NOV.		DEC.		TOTAL.		TOTAL
	Under 5	5 and up.																							Under 5	5 and up.	
ZYMOTIC DISEASES.																											
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	= ..
7 Principal Zymotics.																											
Measles	1	..	5	1	10	..	4	..	3	..	1	..	1	..	..	..	..	..	..	1	1	..	..	..	26	2	= 28
Scarlatina	1	..	1	..	3	1	1	..	1	1	2	..	1	1	..	..	3	2	1	..	..	..	4	..	18	5	= 23
Diphtheria	1	..	1	1	..	..	1	1	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	5	2	= 7
Fevers																											
Typhus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	= ..
Typhoid or Enteric	..	..	..	2	..	1	..	2	..	..	..	2	1	3	..	5	1	3	..	2	..	6	..	..	2	26	= 28
Simple Continued	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	= ..
Whooping Cough	1	1	3	..	2	1	..	..	1	..	2	..	1	..	..	..	..	..	..	..	..	..	2	..	12	2	= 14
Diarrhœa and Dysentery	1	..	..	..	1	..	..	..	1	..	22	2	21	2	9	2	6	..	3	..	1	..	1	..	66	6	= 72
Membranous Croup	2	..	..	..	..	1	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	4	1	= 5
Puerperal Fever	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	..	..	1	..	..	..	6	= 6
Erysipelas	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	1	..	..	1	..	1	3	= 4
Rheumatic Fever	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	= 3
Syphilis	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	= 1
Purpura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	= ..
Pyæmia and Septicœmia	..	..	..	..	..	..	..	1	..	..	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	4	= 4
Influenza	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	= 1
Dis. of uncertain seat, incl'ding Cancer35	..	7	..	..	..	6	..	4	..	2	..	1	..	7	..	4	..	1	..	3	..	4	..	4	..	43	= 43
Diseases Tubercular (Phthisis 59)	1	2	..	10	3	3	1	7	1	3	4	6	7	5	3	2	6	4	4	3	2	8	..	4	32	57	= 89
Diseases of Brain, Spinal Marrow, &c.	3	5	4	5	6	3	5	4	3	3	11	3	6	6	8	2	5	10	10	4	8	4	4	11	73	60	=133
——— of Heart and Blood Vessels	..	2	..	2	..	1	..	4	..	7	..	4	..	6	..	4	..	..	..	1	..	7	..	4	..	42	= 42
——— of Lungs and Air Passages	20	8	11	10	10	7	8	6	6	7	8	4	5	8	4	9	10	2	11	13	8	15	12	10	113	99	=212
——— of Stomach, Liver, &c.	4	2	...	1	2	2	4	2	1	1	3	8	4	2	6	4	4	2	1	2	6	1	4	5	39	32	= 71
——— of Kidneys, Bladder, &c.	1	2	..	1	..	2	..	2	..	1	..	2	..	..	1	1	..	1	..	3	1	1	..	2	3	18	= 21
——— of Uterus, Childbirth, &c.	..	2	..	..	..	1	..	..	..	1	..	2	..	..	..	1	..	..	..	1	..	..	..	1	..	9	= 9
Malformations	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	= 1
Premature Birth	3	..	2	..	3	..	6	..	2	..	3	..	1	..	6	..	4	..	2	..	3	..	1	..	36	..	= 36
Atrophy and Debility	2	..	1	..	1	..	5	..	2	..	2	..	2	..	2	..	1	..	5	..	3	..	6	..	32	..	= 32
Old Age and Natural Decay	..	1	..	2	..	..	..	1	..	2	..	3	..	..	..	..	..	..	..	..	..	..	..	1	..	10	= 10
Diseases of the Bones, &c.	1	..	..	..	..	1	..	..	..	..	..	2	..	1	1	..	..	..	..	..	..	..	..	..	2		= 6
Diseases of the Skin.	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	= 1
Deaths through Violence, &c.	2	8	..	7	2	4	1	4	..	7	3	5	1	4	1	1	3	3	..	4	3	6	..	6	16	59	= 75
Natural Causes	..	..	..	..	..	1	..	..	..	1	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	5	= 5
Not Certified (causes doubtful)	2	3	1	2	1	3	6	1	2	..	6	..	2	3	1	1	1	..	..	1	2	4	2	..	26	18	= 44
	47	44	30	45	44	39	42	40	24	37	69	48	53	50	43	38	44	31	38	39	38	57	37	49	509	517	=1026
	91 Jan.		75 Feb.		81 March.		82 April.		61 May.		117 June.		103 July.		81 Aug.		75 Sept.		77 Oct.		95 Nov.		86 Dec.		=1026 YEAR.		
	121+128=249 1st Quarter.						135+125=260 2nd Quarter.						140+119=259. 3rd Quarter.						113+145=258. 4th Quarter.								

TABLE No. 5.

INSPECTOR OF NUISANCES REPORT FOR THE YEAR 1896.

NUISANCES.

No. of Special Complaints	344
,, Houses Inspected and Re-inspected	4775
,, Nuisances Reported	3035
,, Inspections of Middens	369
Cases in which Summonses were issued	6

DISINFECTION.

No. of Houses or parts of Houses disinfected		387
,, Notices sent to cleanse same		387
,, Houses cleansed by Corporation in default of owners		16
,, Times bath and disinfecting box used by Staff		416
,, Inspections of Infected Houses		931
,, Fever Cases removed to Hospital by Ambulance—		
From Bootle	228	
,, Seaforth	45	
,, Waterloo	3	
,, Crosby	4	
,, Litherland	14	
,, Thornton	1	
		295

COMMON LODGING HOUSES.

No. of Houses registered under the Public Health Act at beginning of year	192
,, Houses newly registered	35
,, Houses vacated by Keepers	71
,, Houses now on the Register	156
,, Day and Night Inspections	1881
,, Infringements of Bye-Laws	152
,, Cases brought before the Magistrates	9

Dairies, Cowsheds and Milk Shops.

No. on Register	129
,, of Inspections made	568
,, ,, Notices served for defects found to exist	110
Dairies, &c. in which Fever occurred during the year ...	3

Cattle Ships.

No. of Inspections of Cattle Ships	622
,, Cases brought before Magistrates	1

Canal Boats.

No. of Inspections of Canal Boats	178
,, Infringements reported	12

Workshops.

No. of Registered Workshops	97
,, Defects reported and remedied during the year after inspection of above	51

Bakehouses.

No. of Bakehouses in use	35
,, Notices sent to cleanse same...	22
,, Bakehouses found with sanitary defects and remedied	1

Table No 6.—Legal Proceedings.

Breaches of Common Lodging House Regulations	9
Nuisances – Defective Drains	3
,, ,, Rain Gutters	2
,, Boneboiling	1
,, Dirty Houses	2
Illegal detention of Limewash Bush	1
Occupation of Unregistered Shippon	1
Exposing for sale Unsound Food	3
Selling Impure Milk	1
DISEASES OF ANIMALS.	
Neglecting to cleanse Cattle Ships	1
Total ...	24

TABLE No. 7.

PROCEEDINGS TAKEN UNDER THE FOOD AND DRUGS ACT FOR THE YEAR ENDED 31st DECEMBER, 1896.

Description of Samples taken.	No. of Samples taken.	No. of Persons proceeded against with result of proceedings		
		Total.	Convicted	Discharged.
Butter	21	...	...	.
New Milk	51	3	2	1
Coffee	2	1	1	...
Mustard	2	...	..	...
Pepper	2	...	..	...
Vinegar	2	...	...	...
Whisky	12	...	...	...
Rum	3	...	...	...
Gin	1	..	...	...
Medicines Prescribed	6	...	...	...
Totals	102	4	3	1

Table No. 8—Analysis of Hard and Soft Waters Supplied by the Liverpool Water Committee, to Liverpool, Bootle and Other Districts in the Four Quarters of 1896.

Description.	DATES OF Analyst Report	DATES OF Samples Drawn	Total Solid Matter in Solution	Organic Carbon.	Organic Nitrogen	Ammonia.	Nitrogen as Nitrates	Total combined Nitrogen	Chlorine	Total Hardness.	Oxygen required to Oxydise In 15 mins.	Oxygen required to Oxydise In 3 hrs.	Remarks.
Rivington—Prescot ...	March 27th.	March 16th.	10·88	·238	·041	·002	·000	·043	1·8	3°4			Clear, slightly Peaty
Vyrnwy			5·68	·258	·029	·000	·000	·029	1·0	2°2			Clear and Peaty
Green Lane Well ..			32·12	·045	·012	·000	·482	·494	3·4	16°7			Clear and Colourless
Dudlow Lane Well ...			17·48	·053	·016	·002	·393	·411	3·1	6°4			Ditto
Tap in Dale Street ...			12·08	·213	·016	·001	·109	·126	1·7	4°3			Clear and slight Tint
Rivington	June 30th.	June 10th.	10·44	·248	·025	·003	·065	·093	1·7	4°5			Clear, a few diatoms
Vyrnwy			4·52	·256	·019	·004	·021	·044	1·0	1°8			Clear, slightly Peaty, some diatoms
Green Lane Well ...			32·00	·032	·017	·000	·393	·410	3·4	16°3			Clear and Bright
Dudlow Lane Well ...			17·88	·067	·021	·002	·415	·438	3·2	6°8			Ditto
Windsor Well			36·76	·077	·011	·000	·393	·404	4·3	22°3			Ditto
Rivington	October 2nd.	Sept. 20th.	10·2	·234	·033	·003	·000	·036	1·6	4°16			Slightly Peaty
Vyrnwy			4·8	·368	·022	·002	·000	·024	1·15	1°69			Ditto
Green Lane Well ...			32·2	·047	·009	·002	·541	·552	2·9	16°3			Clear and Bright
Dudlow Lane Well ...			18·4	·063	·023	·000	·415	·438	3·	7°			Ditto
Windsor Well			35·2	·035	·008	·002	·567	·577	4·	24°3			Ditto
Rivington	Dec. 22nd.	Dec. 2nd & 4th.	10·	·274	·028	·002	·000	·030	1·6	3°9	·09	·187	Peaty
Vrynwy			6·2	·255	·029	·002	·000	·031	1·05	2°86	·094	·176	Ditto
Green Lane Well ...			32·6	·056	·023	·002	·531	·556	3·45	14°	·002	·003	Clear and Bright
Dudlow Lane Well ...			18·6	·054	·023	·002	·504	·529	3·15	6°57	·002	·002	Ditto
Tap in Dale Street ...			14·2	·184	·023	·002	·113	·138	1·9	6°14	·068	·128	Ditto

Table No. 9.

1896.

LOCALITIES.	JAN.		FEB.		MAR.		APRIL.		MAY.		JUNE.		JULY.		AUG.		SEPT.		OCT.		NOV.		DEC.		TOTAL.		
	Under 5	5 and up.																							Under 5	5 and up.	
Aber Street	1	...	1	...	...	...	...	...	1	...	...	1	2	1	...	...	...	1	2	1	1	...	1	...	9	4	13
Addison Street	...	...	...	.	...	...	.	...	...	.	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...		...
Akenside Street	...	...	...	...	...	...	...	...	...	2	...	...	..	...	1	...	1	...	...	...	1	2	...	...	3	4	7
Albany Place	...	...	...	..	...	1	...	...	...	..	...	...	..	...	...	...	...	...	...	...	...	...	...	.	...	1	1
Alma Vale Terrace ...	...	...	...	...	...	...	...	...	...		...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alexandra Dock	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	..	...	...	...	...	...	...	1	1
Ampton Place	...	1	...	...	...	..	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Antonio Street	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	..	...	...	...	...	...	...
Armstrong Street. ...	...	1	1	...	...	...	...	...	...	...	...	1	.	..	1	...	...	..	2	...	2	...	...	..	6	2	8
Artizan's Buildings ...	...	...	..	...	...	...	...	...	...	...	...	...	..	..		..	...	...	..	...	...	...	...	...	...	...	...
Ash Street.	...	...	...	...	...	...	...	1	..	...	1	...	..	...	..	...	...	...	...	...	...	...	...	...	1	1	2
Ashcroft Street	...	...	...	...	...	...	...	...	...	1	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Audley Street	4	...	...	1	...	1	1	2	1	...	...	...	3	...	1	2	2	...	1	1	1	1	...	1	14	9	23
Bala Street	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	1	...	3	1	4
Balliol Road	...	...	...	...	...	...	...	...	...	..	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Battery, The	...	...	.	..	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.	...
Bangor Street	...	...	2	...	...	...	1	1	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	5	2	7
Bank Road	...	1		...	...	1	..	...	...	...	2	...	...	2	1	...	..	...	...	.	...	1	...	...	3	5	8
Beattie Street ...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	..	..	...	...	...	.	...	...	...	.	...	...
Beatrice Street	..	..	1	..	1	..	..	..	..	..	..	1	1	..	1	1	2	..	..	..	..	..	2	1	8	3	11
Benedict Street	..	..	1	..	1	..	1	1	..	..	..	..	1	1	..	..	..	..	..	1	..	..	..	1	4	4	8
Bedford Place	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	2
Bedford Road, Derby Wd	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
Bedford Road, Stanley Ward and Terrace ...	1	1	..	2	2	..	..	1	..	1	1	1	1	1	1	2	..	1	..	..	..	..	..	..	6	10	16
Beech Street	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	2
Bennett Street & Place	..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Berry Street	..	..	..	1	..	1	..	..	..	..	4	1	..	1	1	1	1	..	1	..	2	2	..	2	9	9	18
Bianca Street	..	..	..	..	..	..	..	..	..	..	4	..	..	..	1	..	..	1	..	..	..	..	..	..	5	1	6
Bibby's Lane	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	2	1	3
Carried forward	6	5	8	5	4	4	3	6	2	4	13	7	10	8	10	6	8	3	6	4	7	6	5	5	82	63	145

1896.

LOCALITIES.	JAN.		FEB.		MAR.		APRIL		MAY.		JUNE.		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.		TOTAL.		
	Under 5	5 and up																							Under 5	5 and up.	
Brought Forward	6	5	8	5	4	4	3	6	2	4	13	7	10	8	10	6	8	3	6	4	7	6	5	5	82	63	= 145
Blackburn Grove ...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	3	3
Boreland Street ...	...	...	...	...	...	...	...	...	...	1	2	...	...	...	...	1	...	...	...	...	1	1	1	...	4	3	7
Bostock Street ...	...	...	...	...	1	...	1	...	...	...	...	...	1	...	1	1	1	...	...	...	4	...	...	1	9	2	11
Boston Street ...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Boswell Street ...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	2	...	...	...	1	...	...	...	...	...	3	2	5
Bowles Street ...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	2	...	1	...	5	5
Brasenose Road, with Leslie's Buildings		1	...	...	...	1		1	1	...	...	1	1	...	1	...	...		2	...	...	...	2	...	7	4	11
Breeze Hill ...	...	...	...	...		...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..	.
Bridge Street ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Brook Road ..	1	...	...	...	2		...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	1	...	...	4	3	7
Brookhill Road ...	1	...	..	1	1		1	...	1	...	...	...	3	...	...	...	1	...	...	1	1	1	...	...	9	3	12
Browne Street ...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	2	2
Browning Street ...	1		...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Bullen's Terrace ..	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	.	1
Bulwer Street ...	...	...	...	...			...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	1	...	2	2	4
Burns Street ..	...	1	...	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	2	3	5
Byron Street ...	1	...	..	..	...	...	2		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3
Cambridge Road ...	...	...		...	...	1	..	.	...	...	...	...	1	...	...	...	1	..	...	...	...	...	...	...	2	1	3
Camden Street ...	.	1	...	1	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	1	4	5
Campbell Street ...	...	.		..		..	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	1	3
Canal Street and View	1	...	...	1	2	...	1	1	...	...	...	...	2	..	...	..	...	...	1	...	...	...	..	...	7	2	9
Carolina Street ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	1	..	...	...	...	...	1	...	3	...	3
Cedar Street ...	..	1	...	...	...	..	...	.	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	2
Chapel Street ...	...	1	1	...		...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	1	...	...	2	3	5
Chaucer Street ...	.	...	...	..	1	...		...	...	..	...	...	...	1	..	...	...	1	...	...	...	...	...	1	1	3	4
Chesnut Grove ...	.	...	...	...		1	1	2	...	..	...	2	...	...	...	...	...	1	...	1	...	1	...	...	1	8	9
Church View ...	...	.	..	...	...	2	...		...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2
Church St., Knowsley Wd.	...	...	..	...	...	...	...	1	...	...	..	...	...	...	...	...	...	...	...	...	...	...	..	...	..	1	1
Carried forward	11	12	9	9	11	9	11	12	5	6	18	15	19	10	16	10	14	6	10	9	14	14	10	11	148	123	=271

1896.

LOCALITIES.	JAN.		FEB.		MAR.		APRIL.		MAY.		JUNE		JULY.		AUG.		SEPT.		OCT.		NOV.		DEC.		TOTAL.		
	Under 5	5 and up.																							Under 5	5 and up.	
Brought forward	11	12	9	9	11	9	11	12	5	6	18	15	19	10	16	10	14	6	10	9	14	14	10	11	148	123	=271
Church St., Stanley Wd.	...		..	..	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	2	...	2
Clare Road	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...
Clifford Street	1	...	1	...	1	...	...	1	...	...	2	...	...	1	...	...	...	...	..	1	...	...	...	...	5	3	8
Coleridge Street	...	...	...	...	...	1	...	...	...	...	...	...	...	1		...	1	1	...	...	...	...	...	...	1	3	4
Concord Place	...	...	...	...	...	...	...	...	.	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	1	2	3
Conway Street	...	...	...	...	1	...	...	..	1	...	...	..	1	...	...	1	...	...	1	...	3	1	2	...	9	2	11
Cornwall Street	...	...	..	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Cowper Street	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	...	1	...	1	2	...	...	2	2	4
Cranworth Street ...	...	...	.	1	...	1	...	1	...	1	...	1	...	...	..	...	...	...	...	...	...	...	...	...	...	5	5
Crete Street	...	...	...	...	...	...	...		..	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...
Cyprus Road	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	..	...	...	...	...	...	...	...	...	3	...	3
Davies Street	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	..	...	..	...	...	...	..	...	...
Delaware Street		...	...	...	...	...	...	...	...	...	...	...	..	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Denbigh Street	1	...	...	...	...	...	...	...	...	...	.	...	1	...	...	1	...	...	...	...	1	...	...	...	3	1	4
Derby Rd., Stanley Wd.	2	1	...	2	1	1	...	2	...	2	3	...	2	...	...	1	...	1	1	...	1	2	...	...	10	12	22
Derby Road, Knowsley Ward	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Devon Street	...	...	..	..	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dorset Street	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	1	...	...	...	...	...	2	1	3
Downing Road	..	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	2
Drake Street	..	...	...	...	...	...	..	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dryden Street	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	..	1	1	2
Duncan Street	...	...	...	..	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	..	...
Dundas Street	...	1	2	1	1	...	1	...	1	1	...	...	...	1	...	...	...	...	1	...	1	1	2	...	9	5	14
Effingham Street ...	..	...	...	...	...	...	...	...	...	...	...	...	..	...	...	...	..	...	...	...	...	...	...	...	...	...	...
Elizabeth Street ...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	..	1
Elm Street	...	...	...	...	...	...	...	...	...	.	...	...	...	...	...	...	1	...	...	...	...	...	1	...	2	...	2
Emley Street	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	1	2	3
Carried forward	15	16	12	16	15	12	12	17	7	10	24	18	26	14	18	14	16	10	17	10	22	21	15	11	199	169	368

1896.

LOCALITIES.	JAN.		FEB.		MAR.		APRIL		MAY.		JUNE.		JULY.		AUG.		SEPT.		OCT.		NOV.		DEC.		TOTAL.		
	Under 5	5 and up																							Under 5	5 and up.	
Brought forward	15	16	12	16	15	12	12	17	7	10	24	18	26	14	18	14	16	10	17	10	22	21	15	11	199	169	=368
Ensor Street & Place ...	...	1	..	1	..	...		...	...	...	1	..	...	...	...	..	...	...	. .	...	...	...	..	...	1	2	3
Essex Street	...	...	..	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Everton View	..	...	...	...	...	...	.	..	...	...	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Exeter Road	..	...	..	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	2
Falconer Street	...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Fernhill Road	...	...	..	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1
Flint Street	1		. .	...	...	...	..	...	...	1	...	...	.	1	...	...	1	...	1	...	...	1	...	1	3	4	7
Florida Street	.	...	1	..	..		...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	1	2	3
Formby Place	..		...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	2	.	2
Garden Lane	...	...	2	...	1	..	..	...	1	2	1	...	...	1	...	2	...	...	...	...	1	...	...	...	6	5	11
Garfield Street	1	...	...	2	.	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3
Gonville Road	...		...	...	...	...	...	...	1	...	...	...	...	1	1	...	...	...	...	...	...	1	...	1	2	3	5
Gower Street	...	...	...	..	..	...	..	..	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	..	1
Gray Street	2	.	...	...	...	...	...	...		..	1	1	...	...	1	...	...	...	...	...	...	...		...	4	1	5
Grimshaw Street... ...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	1	...	..	...	...	...	...	.	...	..	1	1
Grove Street	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	. .	..	...
Gloucester Road... ...	...	.	..	...	...	...	...	...	...	...	..	...	...	. .	...	...	...	..	...	...	...	...	...	1	...	1	1
Hamlet Street	.	...	...	..	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.	.	1	1	1	2
Hawthorne Road, Stanley Ward	..	...	...	...	...	...	...	..	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hawthorne Road, Derby Ward		...	...	...	1	1	1	...	1	1	3	1	...	1	...	1	...	...	...	2	...	1	...	1	6	9	15
Hemer Terrace and Place	...	...	...	...	...	...	. .	...	...	.	..	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Henry Street	...	...		1	...	..	1	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..	...	1	1	2
Hertford Road		..	...	...	...	...	...	...	...	...	..	1	...	...	...	...	...	...	...	...	...	1	...	...	...	2	2
Hero Street	...	1	...	...	..	1	...	..	1	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	3	2	5
Holly Street	1		...	...	...	...	1	...	...	...	...	...	..	..	...	...	...	...	...	...	...	...	...	...	2	...	2
Holywell Street	...	...	...	.	.	...	1	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	. . .	...	1	2	3
Carried forward	20	18	15	20	17	14	20	17	12	15	31	22	27	19	20	19	18	10	18	14	24	25	15	17	237	210	447

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LOCALITIES.	JAN		FEB.		MAR.		APRIL.		MAY.		JUNE.		JULY.		AUG.		SEPT.		OCT.		NOV.		DEC.		TOTAL.		.
																									Under 5	5 and up.	
Brought forward	20	18	15	20	17	14	20	17	12	15	31	22	27	19	20	19	18	10	18	14	24	25	15	17	237	210	=447
Hood Street	...	...	...	...	1	...	...	...	1	...	1	...	...	...	1	...	1	...	...	...	...	...	1	...	6	..	6
Hooton Place	...	..	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	2
Hornby Road	...	...	..	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	..	...	...	...	2	2
Hornby Dock Cottages ..	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Hospital (B. Borough) ..	2	10	...	5	1	6	1	8	...	2	...	6	...	5	1	...	1	5	...	6	1	5	...		7	66	73
.. (C. Infectious)...	3	...	1	3	3	1	2	2	1	1	1	3	2	2	1	4	1	1	1	2	...	2	4	...	20	21	41
Howe Street	...	1	...	...	..	...	...	...	1	...	...	...	2	...	..	1	...	...	1	...	...	...	...	1	4	3	7
Irlam Road, Stanley Ward	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Irlam Road, Knowsley Ward	...	..	...	1	1	1	..	...	...	1	...	...	..	...	...	...	...	...	1	1	...	1	...	1	2	6	8
Ivanhoe Street	...	...	...	...	...	1	...	1	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	..	...	2	2
Jersey Street	1	...	...	...	..	...	...	...	...	1	2	...	2	...	2	...	...	...	...	...	...	...	1	...	8	1	9
Johnstone Street... ...	...	...	...	...	...	...	...	...	...	...	1	...	...	..	...	...	...	1	...	1	...	...	...	1	1	3	4
Keats Street	...	..	1	...	1	1	1	...	...	...	2	1	...	..	1	...	1	...	1	...	1	1	...	...	9	3	12
Keble Road	1	1	..	...		...	...	1	...	...	...	.	...	...	...	...	...	...	...	...	...	..	...	...	1	2	3
Kenilworth Street ...	...	...	...	...	1	...	...	1	...	...	...	...	..	1	...	...	...	...	...	...	...	...	...	...	1	2	3
Kent Street	...	...	...	...	...	...	...	...	1	.	...	...	...	...	...	...	...	..	...	...	1	1	...	...	2	1	3
Kings Road	1	..	...	...	2	...	...	...		..	1	...	...	1	...	...	...	1	...	...	...	...	...	..	4	2	6
Keppel Street	..	...	...	...	...	...	...	..	...	...	...	...	...	...	...	.	...	...	...	...		...	...	...	.	...	..
Knowsley Road	. .	...	...	...	...	...	...	...	...	...	2	1	1	...	...	1	...	...	...	...	...	...	..	...	3	2	5
Kirby Place	...	...	...	...	...	...	...	...	...	1	...	..	...	...	...	...	...	...	...	..	...	...	1	...	1	1	2
Laburnum Place	1	...	...	...	..	...	..	...	...	...	..	2	...	...	...	..	...	1	...	...	...	...	.	...	1	3	4
Lamb's Terrace	...	...	...	1	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Langdale Street	...	...	...		...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1
Langton Dock Cottages	...	.	...	...	...	...	...	..	...	...	...	1	...	...	...	...	...	...	...	...	..	...	...	...	...	1	1
Linacre Lane and Village	...	...	...	.	...	...	...	...	..	...	1	1	2	1	...	...	..	...	.	...	...	...	...	...	3	2	5
Lincoln Street	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	.	5	...	5
Carried forward	32	31	17	30	27	24	25	31	16	21	42	37	36	29	26	26	22	19	23	25	28	35	23	29	317	337	654

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LOCALITIES.	JAN.		FEB		MAR.		APRIL.		MAY.		JUNE.		JULY		AUG.		SEP.		OCT.		NOV.		DEC.		TOTAL.		
	Under 5	5 and up.																							Under 5	5 and up.	
Brought forward	32	31	17	30	27	24	25	31	16	21	42	37	36	29	26	26	22	19	23	25	28	35	23	29	317	337	=654
Litherland Road.. ..	1	..	..	1	..	..	..	..	1	1	..	..	3	1	1	..	..	1	..	1	..	..	1	..	7	5	12
Lyster Road	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Lyons Street	1	..	1	..	..	2	..	..	1	..	1	..	1	2	1	1	..	1	..	..	..	2	1	..	7	8	15
Malcolm Street	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Malta Road	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	2
Maun Street	..	1	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	5	1	6
Marsh Lane, Derby Ward	..	..	..	..	..	1	..	..	..	..	..	..	..	..	.	..	1	..	..	..	..	..	..	..	1	1	2
Marsh Lane, Knowsley Ward	1	..	1	1	..	1	..	..	..	1	1	..	1	..	..	..	2	2	..	..	..	2	1	..	7	7	14
Matthew Street	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	2	1	..	..	..	..	1	1	4	3	7
Merton Road, Derby Ward	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2	..	..	..	..	..	..	1	..	1	2	3	5
Merton Road, Knowsley Ward	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Merton Road, Stanley Ward	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Merton Grove	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Miller's Bridge, with Balliol Terrace	..	..	..	..	1	..	..	..	..	..	..	2	2	..	1	..	..	..	..	..	1	..	..	1	5	3	8
Milton Street	2	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3	6
Miranda Road	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	1	4	1	5
Molyneux Street.. ..	..	..	..	..	..	1	1	..	..	..	2	..	..	..	..	..	..	..	1	1	..	..	..	..	4	2	6
Moore Street	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Morningside Road ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	2
Mortuary	..	..	..	2	..	1	..	1	..	4	1	1	..	1	1	..	1	1	..	..	..	..	..	1	3	13	16
Mill Lane	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	1	2
Nevada Street	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	..	1	1	..	..	..	..	..	1	2	4	6
New Street	2	..	..	.	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	2	4	6
Norfolk Street	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	2
Carried forward	39	34	20	36	33	31	27	33	19	28	50	40	44	37	32	27	32	26	25	29	31	41	28	37	380	399	779

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LOCALITIES.	JAN.		FEB.		MAR.		APRIL.		MAY.		JUNE.		JULY.		AUG.		SEPT.		OCT.		NOV.		DEC.		TOTAL.		
	Under 5	5 and up.																							Under 5	5 and up.	
Brought forward	39	34	20	36	33	31	27	33	19	28	50	40	44	37	32	27	32	26	25	29	31	41	28	37	383	399	=779
Olivia Street	2	..	..	..	2	..	1	...	..	..	1	..	3	..	..	..	1	1	2	2	..	..	1	2	13	5	18
Oregon Street	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
Orlando Street	..	..	..	..	..	..	..	1	..	1	2	..	..	1	1	..	..	..	1	..	..	..	..	1	4	4	8
Oriel Road	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1
Oxford Road	..	..	..	..	..	..	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oak Street	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1
Park St., Place & Grove	..	..	..	..	..	2	..	1	2	..	1	1	..	1	..	1	..	..	..	..	..	..	..	..	3	6	9
Peel Road	..	..	..	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..	3	2	5
Pembroke Road	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Percy Street	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	2	3
Pine Grove	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Pleasant Grove	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Pleasant Place	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1
Pleasant View	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2
Pope Street	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Prince's Street	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	2	1	3
Queen's Road	..	..	..	1	1	1	..	1	..	2	1	..	1	..	..	1	..	1	..	1	..	1	..	..	3	9	12
Raleigh Street	..	..	..	1	..	..	..	..	..	..	1	..	1	1	..	1	..	..	..	..	..	..	..	..	2	3	5
Recreation Street	1	..	..	..	1	..	..	..	1	..	..	..	..	..	2	..	..	..	1	..	..	..	1	..	7	..	7
Regent Road, Stanley Ward	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	2	..	2
Regent Road, Knowsley Ward	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..
Rhyl Street	..	..	1	..	..	..	..	..	..	..	2	..	..	..	..	..	1	..	..	..	1	1	..	..	5	1	6
Richmond Grove	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Rimrose Road	..	..	..	1	..	1	3	..	..	..	1	..	..	..	2	..	1	..	..	..	..	1	...	..	7	3	10
Roby Street	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	2
Carried forward	42	37	21	40	39	35	33	36	22	31	60	44	50	40	38	31	36	28	30	32	34	46	34	41	439	441	880

1896.

LOCALITIES.	JAN.		FEB.		MAR.		APRIL.		MAY.		JUNE.		JULY.		AUG.		SEPT.		OCT.		NOV.		DEC.		TOTAL.		
	Under 5	5 and up.																							Under 5	5 and up.	
Brought forward	42	37	21	40	39	35	33	36	22	31	60	44	50	40	38	31	36	28	30	32	34	46	34	41	439	441	=880
Sandfield Place	..	..	..	..	..	..	..	..	..	..	..	1	..	.	..	..	..	..	..	..	..	..	..	..	..	1	1
St. Alban's Road.. ..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	3	3
St. Alban's Square ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Catherine's Road ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Edmond's Road ..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
St. John's Road and Terrace	..	..	..	1	1	1	..	1	..	1	1	..	..	..	..	1	1	..	1	1	..	..	..	...	4	6	10
Sandy Lane with Cross View and Place ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	2	2
Salisbury Road	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	1	..	...	2	2	4
Scott Street	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	..	..	..	..	1	2	3
Sea View Road	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..	1	..	..	..	4	..	4
Seaforth Street	..	1	..	..	..	..	2	..	..	..	..	1	1	..	..	..	..	..	1	..	..	..	..	1	4	3	7
Sheridan Place with Lee's Terrace ..	..	..	4	..	..	1	1	..	..	..	..	..	..	3	..	1	..	..	..	..	..	..	..	1	5	6	11
Shelley Street	..	..	1	..	..	..	..	1	..	..	1	..	..	..	1	..	..	1	..	..	..	..	..	..	3	2	5
Sidney Road	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	1	3	4
Smyrna Road	..	..	..	..	..	..	..		..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1
Southey Street	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	2	2	4
Speke Place	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Spring Grove	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1
Stafford Street	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..	1	..	..	..	1	..	3	2	5
Stanley Road, Derby Ward	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	1	..	..	..	2	..	..	..	5	5
Stanley Road, Knowsley Ward ..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Stanley Road, Stanley Ward	..	..	2	2	..	..	..	1	..	..	1	2	..	..	..	..	..	..	..	..	..	2	..	..	3	7	10
Strand Road, Derby Ward	..	1	..	..	..	..	..	..	..	..	..	..	..	3	1	..	..	1	1	..	..	..	..	..	2	5	7
Strand Road, Knowley Ward	1	..	..	..	..	..	..	..	..	2	..	..	1	..	..	..	..	..	1	..	..	..	..	1	3	3	6
Carried forward	43	40	28	44	41	38	39	39	23	36	64	48	52	49	41	37	39	31	36	37	37	54	35	45	478	498	=976

1896.

LOCALITIES.	JAN.		FEB.		MAR.		APRIL.		MAY.		JUNE.		JULY.		AUG.		SEPT.		OCT.		NOV.		D		TAL.		
	Under 5	5 and up.																							Under 5	5 and up.	
Brought forward	43	40	28	44	41	38	39	39	23	36	64	48	52	49	41	37	39	31	36	37	37	54	35		478	498	=976
Suffolk Street	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	..
Summerseat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...
Surrey Street	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...		3	...	3
Sussex Street	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...		2	...	2
Seymour Street	...	...	..	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...		...	1	1
Talbot Street		..	1	...	2	...	...	...	...	...	1	...	...	...	...	...	1	...	...	..	...	...	2		7	...	7
Tattersall Place	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...	...	...
Tennyson Street... ...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		1	2	3
Trinity Road	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...		1	1	2
Tudno Street	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...		1	1	2
Tudor Street	1	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
University Road... ...	...	...	..	...	...	...	...	..	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	...	...	2	2
Vermont Street	...	...	...	..	...	...	1	...	...	...	...	...	...	...	...		1	...	...	...	...	...	...	...	2	...	2
Viola Street	...		...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	1	...	...	2	1	3
Virginia Street	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	2	3
Wadham Road ..	1	2	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	..	...	...	2	1	5	6
Washington Street ...	...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Waterworks Street ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	..
Waverley Street... ...	...	...	...	...	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wm. Henry Street, with 1st and 2nd streets	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	..	...	1	...	...	1	...	...	2	2	4
Windsor Place	...	..	...	...	..	...	...	...	..	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Wordsworth Street ...	1	...	...	...	...	1	..	...	...	...	1	...	...	...	...	...	...	..	...	1	...	...	...	...	2	2	4
York Street	..	..	...	..	...	...	...	...	...	...	2	...	..	...	...	...	2	...	...	...	...	...	...	...	4	...	4
Total	47	44	30	45	44	39	42	40	24	37	69	48	53	50	43	38	44	31	38	39	38	57	37	49	509	517	=1026